

**AMENDMENTS TO THE SPECIFICATION:**

Please add the following title on page 1, line 1:

**HEAT TRANSMITTING FLUID AND ITS RESPECTIVE OBTAINING PROCESS**

Please make the following amendments to the first paragraph beginning on page 1, line 1:

~~"HEAT TRANSMITTING FLUID AND ITS RESPECTIVE OBTAINING PROCESS", the~~

The present invention refers to a revolutionary non-toxic heat transmitting fluid, applicable to thermal oil systems in the food, pharmaceutical, cosmetic and chemical industry, which need heating without the use of flame or electrical resistance, to which original innovating functional disposition has been given, being different from other types of heat transmitting fluids usually found in the market.

Please make the following amendments to the second paragraph beginning on page 3, line 5:

**HEAT TRANSMITTING FLUID COMPOSITION.**

The heat transmitting fluid composition, expressed in percentage (%), in weight, in relation to the product total weight is the following:

- Anti-oxidant, preferentially derived phenyl or equivalent, being added in the fluid between ~~0,1~~ 0.1 and ~~0,5%~~ 0.5%, in mass;
- Basic fluid, polyinternalolefines PIO or polyalfaolefines PAO being added in the fluid between ~~99,5-99.5~~ and ~~99,9%~~ 99.9%, in mass;

**HEAT TRANSMITTING FLUID MANUFACTURING PROCESS.**

The process or, more specifically, the procedure for the obtaining of heat transmitting fluid consists of the following steps:

- 1) Weighting of reagents used in the heat transmitting fluid preparation, using a duly gauged scale;
- 2) Homogenization of polyinternalolefine or polyalphaolefine with the help of suitable mechanical shakers suitable for low viscosity, preferentially with medium speed and enough capacity to contain all reagents to be used for the manufacturing of fluid and provided with heating system for work between room temperature and up to 70°C, during the homogenization;
- 3) Addition of antioxidant in the container mentioned in item 2, under continuous shaking;
- 4) Mixture and homogenization after the addition of antioxidant, being the mixing time defined according to the practice, until a homogeneous mixture is obtained. After the mixture, the heat transmitting fluid is placed in suitable containers.

Thus, it should be understood that the referred product is extremely simple in its formulation, showing, therefore, easy feasibility and supplying excellent practical and functional results on the known heat transmitting fluids.

Please make the following amendments to the first paragraph beginning on page 4, line 1:

The heat transmitting fluid now proposed can be used in application temperatures between -40 and 395°C, being that its specific application is of heat transmitting fluid totally synthetic, for thermal oil systems in the food, pharmaceutical, cosmetic and chemical industry.

In addition to that, being its base of synthetic hydrocarbon, it has properties such as: cinematic viscosity of 20 mm<sup>2</sup>/s at 40°C according to DIN 51562, thermal dilation coefficient around ~~0,009/°K~~ 0.009/°K, steam pressure at 150 °C around ~~0,1~~ 0.1 mbar and Conradson Charcoal waste around ~~0,01%~~ 0.01 % in weight.

Please make the following amendments to the Abstract on page 7:

~~"HEAT TRANSMITTING FLUID AND ITS RESPECTIVE OBTAINING PROCESS"~~, the present invention refers to a revolutionary A non-toxic heat transmitting fluid, applicable to thermal oil systems in the food, pharmaceutical, cosmetic and chemical industry, which need heating without the use of flame or electrical resistance, to which original innovating functional disposition has been given, ~~being~~. The heat transmitting fluid is different from other types of heat transmitting fluids usually found in the market, since it is composed of antioxidant based on derived phenyl and fluid based on polyinternalolefines PIO or polyalfaolefines PAO, ~~being satisfactorily applied as~~. The heat transmitting fluid is applied in application temperatures between  $-40$  and  $395^{\circ}\text{C}$ , being that its specific application is of heat transmitting fluid totally synthetic, for thermal oil systems in the food, pharmaceutical, cosmetic and chemical industry.